AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all previous listings and versions of claim in this application.

1. (Currently Amended) A preventive treatment method for a multilayer semiconductor structure that includes a support substrate, at least one intermediate layer of insulator material and a surface layer of semiconductor material in which the surface layer is to be subjected to a subsequent chemical treatment, which method comprises: forming a protective layer between the intermediate layer and the surface layer, with the protective layer being made from a material chosen to be sufficiently resistant to the chemical treatment to protect the intermediate layer from chemical attack during the subsequent chemical treatment of the surface layer of the multilayer semiconductor structure; forming a structure by bonding a donor substrate to the support substrate; and then transferring at least the surface layer from the donor substrate to the support substrate by a layer transfer technique to form the multilayer semiconductor structure.

2. (Cancelled)

3. (Currently Amended) The method of claim [[2]] 1 which further comprises providing the intermediate and protective layers on a surface of at least one of the support substrate and the donor substrate before bonding.

4. (Currently Amended) The method of claim [[2]] 1 which further comprises providing the intermediate layer on a bonding surface of one of the substrates and the protective layer is provided on a bonding surface of the other substrate before bonding.

5. (Currently Amended) The method of claim [[2]] 1 wherein the surface layer is transferred by providing a weakened zone in the donor substrate at a depth sufficient to define

the surface layer, bonding the surface layer of the donor substrate to the protective layer and then detaching the surface layer from the donor substrate.

6. (Original) The method of claim 5 wherein the weakened zone is provided by at least one of implanting atomic species in the donor substrate to a predetermined depth, or by providing a porous layer in the donor substrate.

7. (Original) The method of claim 1 which further comprises forming the multilayer semiconductor structure by bonding a donor substrate to the protective layer and then obtaining the surface layer by at least one of chemically etching, grinding, polishing, using CMP, or abrading the donor substrate.

8. (Cancelled)

9. (Currently Amended) The method of claim [[8]] 1 wherein the intermediate layer at least partly forms an insulating layer of the structure.

10. (Original) The method of claim 9 wherein at least a part of the intermediate layer is made of SiO_2.

11. (Original) The method of claim 9 which further comprises forming the intermediate layer by oxidation.

12. (Currently Amended) The method of claim [[8]] 1 wherein the protective layer forms at least a part of the insulating layer of the structure.

13. (Original) The method of claim 1 wherein the protective layer is made from a nitride material.

14. (Original) The method of claim 13 wherein the protective layer is made of Si_3N_4 or SiON.

15. (Currently Amended) The method of claim 1 wherein the ~~multilayer semiconductor structure is formed by bonding a~~ layer transfer ~~structure~~ is facilitated by providing the donor substrate with a weakened zone beneath the layer that is to be transferred to the support substrate.

16. (Currently Amended) The method of claim [[15]] 1 wherein the protective layer is formed by depositing a nitride on a bonding surface of the ~~transfer structure~~ donor substrate or the support substrate.

17. (Currently Amended) The method of claim [[15]] 1 which further comprises providing the multilayer structure with a weakened zone ~~between two layers, and~~ at the bonding interface by providing at least one of the two layers with a rough surface.

18. (Original) The method of claim 17 which further comprises utilizing a chemical treatment to roughen the surface of at least one of the two layers before bonding.

19. (Currently Amended) The method of claim 1 wherein the chemical treatment of the surface layer includes a chemical treatment [[is]] based on hydrofluoric acid.

20. (Currently Amended) In a preventive treatment method for a multilayer semiconductor structure having a support substrate, at least one intermediate layer and a surface layer with the multilayer semiconductor structure being made by bonding a donor substrate to the support substrate and then transferring at least the surface layer from the donor substrate to the support substrate by a layer transfer technique and in which the surface layer is to be subjected to a subsequent chemical treatment, the improvement ~~comprising~~ which comprises forming a protective layer between the intermediate layer and the surface layer, with the protective layer

being made from a material chosen to be sufficiently resistant to the chemical treatment to protect the intermediate layer from chemical attack during the subsequent chemical treatment of the surface layer.